

IN THE SPECIFICATION: (Line and page numbers refer to the English translation filed concurrently herewith)

Please replace the paragraphs beginning on page 4, line 9 to page 9, line 11 with the following paragraphs;

--It is an object of the present invention to solve at least the problems in the conventional technology.

The apparatus for traction positional control according to one aspect of the present invention includes a hauling unit that hauls a subject to bend or rotate the subject, a control unit that outputs a control signal, and a driving unit that drives the hauling unit based on the control signal. The control signal corresponds to a target value that is input by an operating unit. The control unit controls a variation amount of the control signal output in a predetermined range including a position of the hauling unit in a state before the hauling unit hauls the subject to be greater than a variation amount of the control signal output outside the predetermined range.

The apparatus for traction positional control according to another aspect of the present invention includes a wire that hauls a subject to bend or rotate the subject, a control unit that outputs a control signal, and a motor that drives the wire based on the control signal. The control signal corresponds to a target value that is input by a joystick. The control unit controls a variation amount of the control signal output in a predetermined range including a position of the wire in a state before the wire hauls the subject to be greater than a variation amount of the control signal output outside the predetermined range.

The apparatus for traction positional control according to still another aspect of the present invention includes a hauling unit that hauls a subject to bend or rotate the subject,

an output unit that outputs an operation command value signal that corresponds to a target value that is input by an operating unit, a feedforward control unit that compensates the operation command value signal based on a feedforward compensation value, and generates a feedforward control signal, a drive control unit that generates a control signal based on the feedforward control signal, and a driving unit that drives the hauling unit based on the control signal.

The apparatus for traction positional control according to still another aspect of the present invention includes a hauling unit that hauls a subject to bend or rotate the subject, an output unit that outputs an operation command value signal that corresponds to a target value that is input by an operating unit, a feedforward control unit that compensates the operation command value signal based on a feedforward compensation value, and generates a feedforward control signal, a drive control unit that generates a control signal based on the feedforward control signal, a correction control unit that controls a variation amount of the control signal output in a predetermined range including a position of the hauling unit in a state before the hauling unit hauls the subject to be greater than a variation amount of the control signal output outside the predetermined range, and a driving unit that drives the hauling unit based on the control signal.--

Please delete the heading on page 12, line 19, which reads “(First embodiment)”.

Please delete the heading on page 19, line 10, which reads “(Second embodiment)”.

Please replace the paragraph on page 20, line 3 with the following rewritten paragraph:

The same effect as that of the ~~second~~ first embodiment can be obtained by the second embodiment.

Please delete the heading on page 20, line 5, which reads “(Third embodiment)”.

Please delete the heading on page 22, line 19, which reads “(Fourth embodiment)”.

Please delete the heading on page 23, line 19, which reads “(Fifth embodiment)”.

Please delete the heading on page 24, line 22, which reads “(Sixth embodiment)”.

Please delete the heading on page 25, line 20, which reads “(Seventh embodiment)”.

Please delete the heading on page 27, line 10, which reads “(Eighth embodiment)”.

Please delete the heading on page 38, line 21, which reads “(Ninth embodiment)”.

Please delete the heading on page 41, line 1, which reads “(Tenth embodiment)”.

Please delete the heading on page 47, line 11, which reads “(Eleventh embodiment)”.

Please delete the heading on page 48, line 24, which reads “(Twelfth embodiment)”.

Please delete the heading on page 49, line 20, which reads “(Thirteenth embodiment)”.

Please delete the heading on page 52, line 10, which reads “(Fourteenth embodiment)”.